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Rached Ksontini

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EXAMINER

SCHWARTZ, DARREN B

ART UNIT

PAPER NUMBER

2435

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/528,787	Applicant(s) KSONTINI ET AL.	
	Examiner DARREN SCHWARTZ	Art Unit 2435	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. In light of amendment to the claims, the claim objection is withdrawn.
2. In light of amendment to the claims, the 35 U.S.C. 112, second paragraph rejection of claims 1-9 is withdrawn. However, a new issue is raised as set forth below.
3. Applicant's arguments, see REMARKS, filed 09 September 2008, have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made below.

The fact that the Examiner may not have specifically responded to any particular arguments made by Applicant and Applicant's Representative, should not be construed as indicating Examiner's agreement therewith.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites "initiating a pairing procedure by transmitting a cryptogram contained in the second device, and comprising an identifier belonging to the second device." It is unclear as what is "comprising an identifier belonging to the second

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device,” such interpretations include, but are not limited to: the pairing procedure comprising an identifier or the identifier of the second device. This issue is further raised as the verb of the limitation is "initiating" while the subject of the limitation is “a pairing procedure.”

Any claim not specifically addressed above is being rejected as incorporating the deficiencies of a claim upon which it depends.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3 and 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman (U.S. Pat 6975729 B1), hereinafter referred to as Perlman, in view of Sasaki (U.S. Pat 6351536 B1), hereinafter referred to as Sasaki, in further view of Kustin et al (U.S. Pat 7185196 B1), hereinafter referred to as Kustin.

Re claim 1: Perlman teaches a pairing control method between a first device [Fig 3, elt 110: FIREWALL] and a second device [Fig 3, elt 104: COMPUTER SYSTEM 104] pairing control method aiming to secure the data exchange with the aid of a unique pairing key (Fig 3, elts 104 & 110: col 3, lines 1-3 and col 4, lines 39-40), the pairing control method comprising:

- verifying the pairing between the two devices and using the unique pairing key if the pairing has been already carried out (col 2, lines 37-47), if not,

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- initiating a pairing procedure [Fig 3] by transmitting a cryptogram [Fig 3, elt 302, 303, 306, 308, 310] contained in the second device [Fig 3, elt 104], and comprising an identifier belonging to the second device [Fig 3, elt 302 contained in Fig 3, elt 104], the cryptogram being encrypted by a secret key common to all the first devices [Fig 3, elt 306: col 4, lines 55-56] (col 5, lines 3-10),

- decrypting the cryptogram [Fig 3, elt 308] with the first device [Fig 3, elt 110] and extracting from the cryptogram [Fig 3, elts, 308 & 310] the identifier of the second device [Fig 3, elt 302] (col 5, lines 54-57),

However, Sasaki teaches:

- generating a pairing key based on the identifier, storing the pairing key in the first device, the pairing key used to pair with the second device (Fig 4, elts 101, 102, 103, 201, 202, 203 & 104: col 7, lines 36 - 49).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Perlman with the teachings of Sasaki, for the purpose of providing an enciphering method used in a network system used by a lot of people (col 1, lines 36-42).

However, Kuskin teaches:

- searching for a free location among the locations reserved for the pairing data in the first device and in this case (col 4, lines 33-64).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Perlman and Sasaki with the teachings of Kuskin, for the purpose of providing key storage while utilizing limited

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memory and power consumption. It is known in the art that computing resources are limited in some capacity (e.g. memory, processing speed, etc.) and utilizing limited memory efficiently is well known.

Re claim 2: The combination of Perlman, Sasaki and Kuskin teaches the pairing key is based on the identifier of the second device and on the data of the first device (Fig 4, elts 101, 102, 103, 201, 202, 203 & 104: col 8, lines 27-60).

Re claim 3: The combination of Perlman, Sasaki and Kuskin teaches the cryptogram is stored in the first device and encrypted with a secret key common to the second devices [Fig 3, elt 306] (Perlman: Fig 3: elts 302, 303, 306, 308, 310; Abstract, lines 11-13).

Re claim 5: The combination of Perlman, Sasaki and Kuskin teaches the pairing is conditioned by the introduction of a secret code transmitted to the first device and verified by said first device (Perlman: Fig 4B: elts 417, 418, 419, 415 & 422: col 5, line 61 – col 6, line 8).

Re claim 6: The combination of Perlman, Sasaki and Kuskin teaches the secret code belongs to and is unique to each first device (Perlman: Fig 3, elts 302, 303, 308, 310, 302, 314, 328, 329 & 330).

Re claim 7: The combination of Perlman, Sasaki and Kuskin teaches the required secret code is different in each pairing (Perlman: col 1, lines 50-55).

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman (U.S. Pat 6975729 B1), hereinafter referred to as Perlman, Sasaki (U.S. Pat 6351536

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B1), hereinafter referred to as Sasaki and Kustin et al (U.S. Pat 7185196 B1), hereinafter referred to as Kustin, in further view of, Marino et al (U.S. Pat 6026165 A), hereinafter referred to as Marino.

Re claim 4: The combination of Perlman, Sasaki and Kustin teaches all the limitations of claim 1 as previously discussed.

However, Marino teaches each location includes an activity counter updated during every positive verification of the pairing based on this location, the search for the location to be replaced being determined by the value of the activity counter (Marino: col 7, lines 42-44, lines 54-56 & lines 64-65; col 8, lines 7-15; col 9, lines 19-27).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Perlman, Sasaki and Kustin with the teachings of Marino, for the purpose of indexing the keys for quick retrieval when utilizing limited memory resources.

7. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman (U.S. Pat 6975729 B1), hereinafter referred to as Perlman, Sasaki (U.S. Pat 6351536 B1), hereinafter referred to as Sasaki and Kustin et al (U.S. Pat 7185196 B1), hereinafter referred to as Kustin, in further view of Tello (U.S. Pat 6463537 B1), hereinafter referred to as Tello.

Re claim 8: Tello teaches it comprises the steps of: transmitting a unique identifier of the first device and a unique identifier of the second device to a management centre, verifying the conformity of this pairing and calculating by means of

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the management centre the corresponding secret code on the basis of the two identifiers, transmitting this secret code to the user, initiating the pairing and requesting the introduction of the secret code, by means of the first device, calculating by means of the first device the necessary secret code on the basis of the identifiers of the first and second devices, comparing the calculated code with that which has been introduced by the user, accepting the pairing if the two codes are identical (Fig 1; col 17, line 52 - col 18, line 3; col 18, lines 32-39; col 24, lines 25-45).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Perlman, Sasaki and Kustin with the teachings of Tello for the purpose of providing a manager for verifying the two devices are allowed to inter-connect. All references are analogous art as they teach transmission of data from a first device to a second device using device dependant information.

Re claim 9: The combination of Perlman, Sasaki and Kustin and Tello teaches it comprises the steps of determining the new secret code on the basis of the two identifiers and of an index that represents the number of pairings previously carried out, whereas the first device stores this index in its memory (Kustin: Fig 2; col 4, lines 26-64)

Conclusion

Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to

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specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the text of the passage taught by the prior art or disclosed by the examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DARREN SCHWARTZ whose telephone number is (571)270-3850. The examiner can normally be reached on 8am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571)272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. S./

Examiner, Art Unit 2435

/Kimyen Vu/

Supervisory Patent Examiner, Art Unit 2435